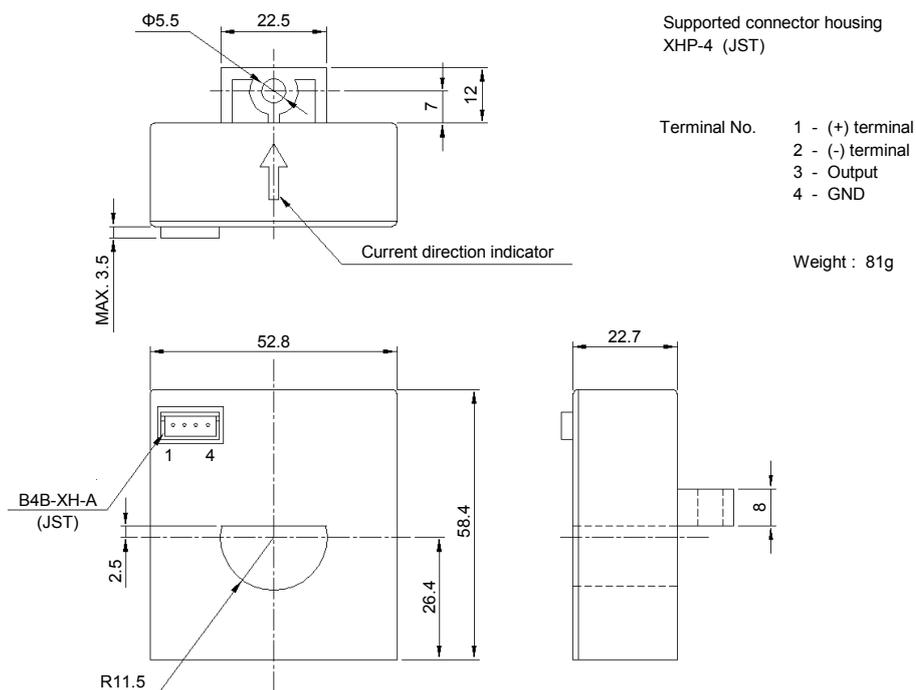# KOHSHIN

HS-UD

- Rated current   300A ~ 500A

- Superior in response, linearity and temperature characteristics

- Both the voltage output and the current output were prepared

Applications

Inverters, Servo drivers, Power supply equipment, NC machine tools

Dimensions

(mm)

Φ5.5 22.5 12 7

MAX. 3.5

Current direction indicator

52.8

B4B-XH-A
(JST)

1   4

2.5

58.4

26.4

R11.5

22.7

8

Supported connector housing
XHP-4 (JST)

Terminal No.   1 - (+) terminal
2 - (-) terminal
3 - Output
4 - GND

Weight : 81g

General tolerance: ±0.5

KOHSHIN

Specification

Ta=25°C

Type		Voltage output type			Current output type		
		HS-UD300V4B15	HS-UD400V4B15	HS-UD500V4B15	HS-UD300A015B15	HS-UD400A020B15	HS-UD500A025B15
Rated current	[If]	±300A	±400A	±500A	±300A	±400A	±500A
Continuously flowing DC current		±450A	±450A	±450A	±450A	±450A	±450A
Saturation current	[Is]	±900A	±1200A	±1200A	±800A	±1000A	±1200A
Linearity limits		0~±900A	0~±1200A	0~±1200A	0~±800A (RL=10Ω)	0~±1000A (RL=5Ω)	0~±1200A (RL=1Ω)
Rated output	[Vh]	±4V±1% (RL=10kΩ)			±150mA±1%	±200mA±1%	±250mA±1%
Residual output	[Vo]	Within ±20mV			Within ±0.2mA		
Output linearity		Within ±0.5%					
Second coil resistance		Approx. 16.8Ω					
Response time		Within 1μs (The smaller one on either at di/dt = 100A/μs or If/μs.)					
Response performance		Within 10%					
Hysteresis voltage range		Within 20mV			Within 0.2mA		
Output Temp. Coef.		Within ±0.02%/°C					
Residual output Temp. Coef.		Within ±1mV/°C			Within ±0.01mA/°C		
Control power supply		±15V±5%					
Consumption current		20mA+(Input current/2000)					
Operating Temp.		-10°C~+80°C					
Storage Temp.		-15°C~+85°C					
Dielectric withstand voltage		2500V AC 50/60Hz 1minute					
Insulation resistance		Not less than 500MΩ 500V DC					

Note1)   The indicated residual voltage is the one after the core hysteresis is removed.
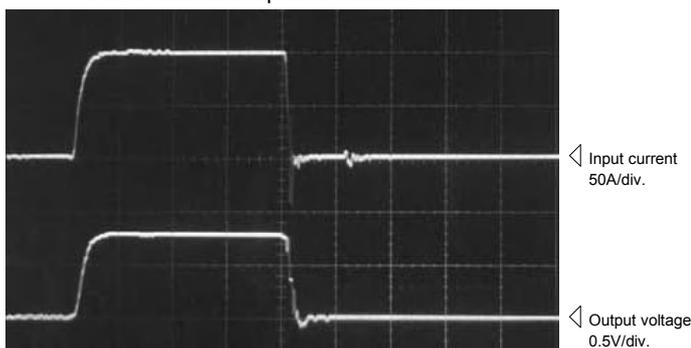Note2)   Energization time of saturation current shall be within 1 second.
Note3)   Energization time of continuous live DC current x150% shall be within 1 minute.
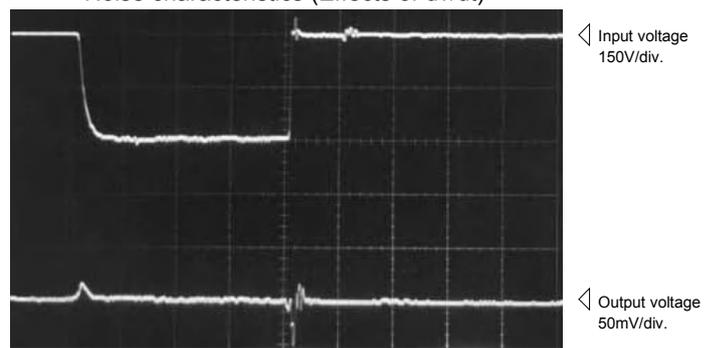
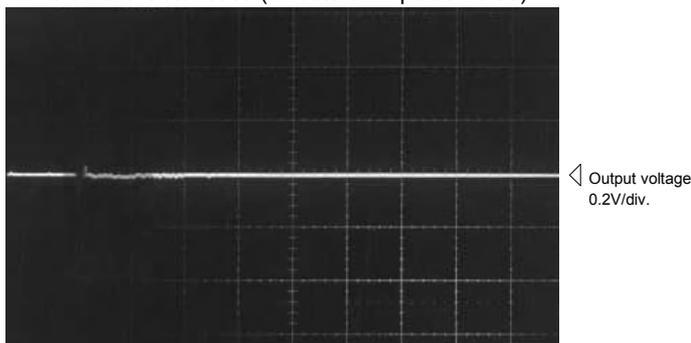## Characteristics chart   HS-UD500V4B15   5μs/div. Time base
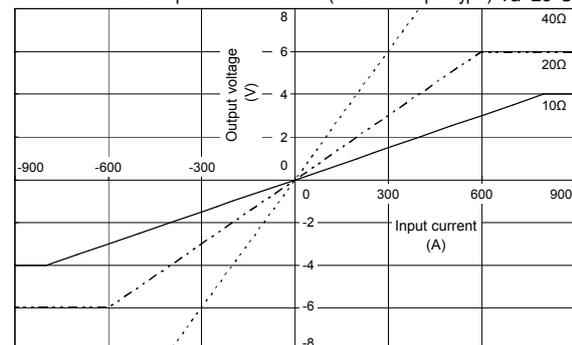
Pulse current response characteristic

◁ Input current 50A/div.

◁ Output voltage 0.5V/div.

Noise characteristics (Effects of dv/dt)

◁ Input voltage 150V/div.

◁ Output voltage 50mV/div.

Noise characteristics (Effects of impulse noise)

◁ Output voltage 0.2V/div.

Load resistance-output characteristics (Current output type) Ta=25°C

Note: The marks " ◁ " means 0V or 0A.